

REMARKS

The Examiner objects to claims 36 and 53 on the grounds that the prior art of Westburg (U.S. Patent No. 5,946,309) discloses that control data is inserted into headers of the ATM cells and that the control data is used to direct data to the correct [AAL] layer. It is respectfully submitted that this is not what is claimed in either claim 36 or 53 (new claims 72 and 88).

The arrangement of Westburg does disclose (see Fig. 3) a mux/demux system for ATM traffic carried in more than one AAL type (e.g., AAL1 and AAL5). The plurality of inputs at AAL-mux 207 is combined onto a single, shared communication channel. Like any mux/demux system, the arrangement of Westburg needs to be able to discriminate between the data input at the various input ports at the mux so that it can ensure that data at the demux is passed to the correct output. An essential part of the arrangement of Westburg is that mux 207 is set up so that each input port on the mux is dedicated to a particular type of AAL. Also essential to the functioning of this arrangement is the set up of demux 310 in which each output port is dedicated to a particular type of AAL.

The skilled man would interpret the reference in Westburg (see, col. 4, lines 57-67) to control data 330 that “permits the AAL-demux 310 to *identify the source and destination* of the communication data stored in each incoming ATM cell so that it can direct the communication data to the appropriate AAL layer in the receiving station 315 [emphasis added]” in the context of the mux/demux arrangement of Westburg. The skilled reader would find in the same paragraph that Westburg clarifies that the function of this control data is actually to *synchronize* the demux with the mux. The skilled reader would be familiar with the conventional technique of synchronizing demultiplexers with multiplexers. This is a basic technique in which data from each multiplexer input is sampled in turn and combined into successive slots on the multiplexed channel to the

demultiplexer. The receiving demultiplexer is synchronized in that it is programmed to pass the data from the first received slot to its first output and data from successive slots to respective successive outputs, thus recreating the data streams input to the multiplexer.

The skilled reader would appreciate that this conventional technique would *only* enable the identification of ports on mux-207, not the true source or destination of the data. Hence, it would be clear to the skilled reader that the above quotation from Westburg needs to be interpreted with care in that Westburg does not in fact teach the identification of the true source or ultimate destination of the ATM data. All that Westburg is in fact describing is a means of identifying the port on which data entered the mux (and implicitly the port at which it should exit the demux as this should match the mux input port).

In contrast, the present invention according to new claims 72 and 88 provides a means that explicitly identifies the true source or destination of the data, particularly of data in the mini-cell form. This is confirmed by various embodiments of the identification means, e.g., PCM circuit identifier or SDH virtual container identity (see the paragraph of the description bridging pages 5 and 6). Advantageously, this allows for transport of AAL2 type data together with ATM data on a common communications bus.

The Examiner also objects to claims 46 and 63 on the grounds that the prior art of Westburg (U.S. Patent No. 5,946,309) discloses that control data is inserted into headers of the ATM cells and that the control data is used to direct data to the correct [AAL] layer. It is respectfully submitted that this is not what is claimed in either claim 46 or 63 (new claims 82 and 98).

The skilled reader would appreciate that this conventional technique would *only* enable the identification of AAL types (as described by Westburg at col. 4, lines 57-67) *given that* each input of the mux 207 is dedicated to a single type of AAL. Hence, it would be clear to the

skilled reader that Westburg does not in fact teach the identification of the AAL type. All that Westburg is in fact describing is a means of identifying the port on which data entered the mux-207 (and implicitly the port at which it should exit the demux 310 as this should match the mux input port).

Furthermore, there is no teaching in Westburg of the identification of the AAL-type of the data on the path between the mux and demux. The skilled reader would understand that, in the arrangement of Westburg, information on AAL-type is not carried in the data: only input port identity. What Westburg actually states is "The AAL-mux 207 also generates control data 330, which is used to *synchronize* the AAL-mux 207 and the AAL-demux 310. The control data 330 *permits the AAL-demux 310 to identify* the source and destination of the communication data stored in each incoming ATM cell...[emphasis added]". The skilled reader would understand that the arrangement of Westburg only permits identification of the AAL type from the combination of the mux input port identity that is carried in the data with a knowledge of the set-up of the mux (i.e., which input port is carrying which signal) that is not carried in the data according to Westburg. Specifically, Westburg does not teach ATM communications with either a field in the data or a bus control signal that explicitly identifies the type of data, e.g., that says "AAL5" or "AAL1".

In contrast, the present invention according to new claims 82 and 98 provides a field that explicitly identifies the AAL-type of the data of each cell.

Allowance of all claims is respectfully requested.

A check in the amount of **\$172.00** is included for two (2) extra independent claims.

Petition is hereby made for a three-month extension of the period to respond to the outstanding Official Action to January 31, 2004. A check in the amount of **\$950.00**, as the Petition fee, is enclosed herewith. If there are any additional charges, or any overpayment, in connection

with the filing of the amendment, the Commissioner is hereby authorized to charge any such deficiency, or credit any such overpayment, to Deposit Account No. 11-1145.

Wherefore, a favorable action is earnestly solicited.

Respectfully submitted,

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